

Date: Tuesday, 31/03/2009 1:04:28 PM  
 User: Julie Dawson

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : WASHER  
 Job Number : 46740  
 Estimate Number : 10374  
 P.O. Number :  
 This Issue : 31/03/2009 S.O. No. :  
 Prsht Rev. : NC Part Number : D31375  
 First Issue : / / Type : MACHINED PARTS Drawing Number : D3137 REV F 09/05/04  
 Previous Run : 42270 Project Number : N/A  
 Drawing Revision : F  
 Material :  
 Due Date : 07/04/2009 Qty: 30 Um: Each  
 Written By :  
 Checked & Approved By : JULIE DAWSON  
 Comment : Est A 04.11.04 New issue KJ/JLM  
 Est Rev B 08.07.03 ECN1207 EC verified by DD

## Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

M6061T6R0750

6061-T6 Round Bar .750"



0.0258

7725 RGS/30 parts



Comment: Qty.: 0.0248 f(s)/Unit Total : 0.6552 f(s)

6061-T6 Round Bar 0.75"

Material: 6061-T6 Aluminum Bar Ø.750" (QQ-A-200/8 or QQ-A-225/8)

(M6061T6R.7500)

Batch: 110791

825 Rt  
SA 09/05/01

2.0

HARDINGE

HARDINGE CNC LATHE SMALL



Comment: HARDINGE CNC LATHE SMALL

1-Machine as per Folio FA471 and Dwg D3137

2-Identify as D3137-5

3-Deburr

SA 09/05/01 (32)

3.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

SA 09/05/01 (32)

4.0

QC8

SECOND CHECK



Comment: SECOND CHECK

SA 09/05/01 (32)

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

umD/F2 (132) 09/05/04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WASHER

Job Number: 46740

Part Number: D31375

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



4



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

09-05-04 (32)

7.0

QC5

INSPECT WORK TO CURRENT STEP



cont

Comment: Inspect work to Step 7

09/05/04 (32)

8.0

PACKAGING 1

PACKAGING RESOURCE #1



(32)

Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 235B

9/5/4

SP

9.0

QC21

FINAL INSPECTION/W/O RELEASE



09/05/05

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF 09-05-05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

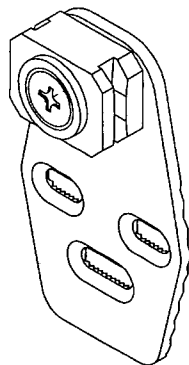
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

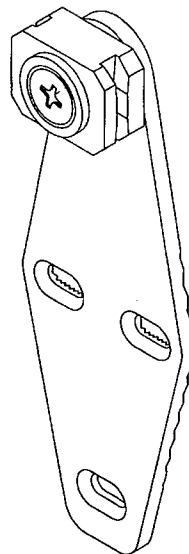
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

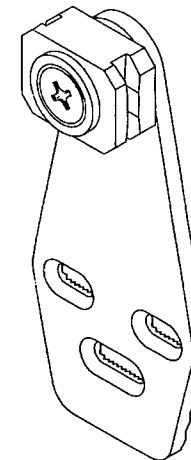




**D3137-041 BRACKET ASSEMBLY**



**D3137-043 BRACKET ASSEMBLY**



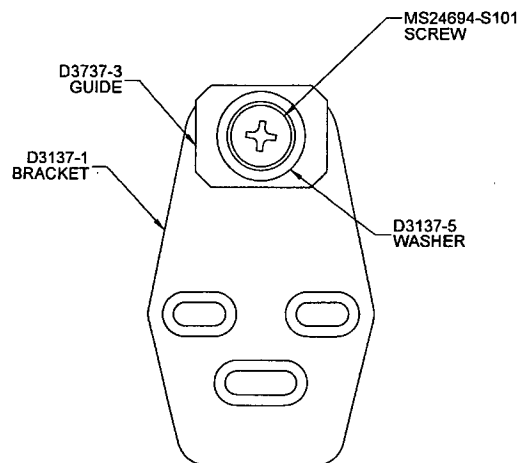
**D3137-045 BRACKET ASSEMBLY**

**RELEASED**  
08-06-2017

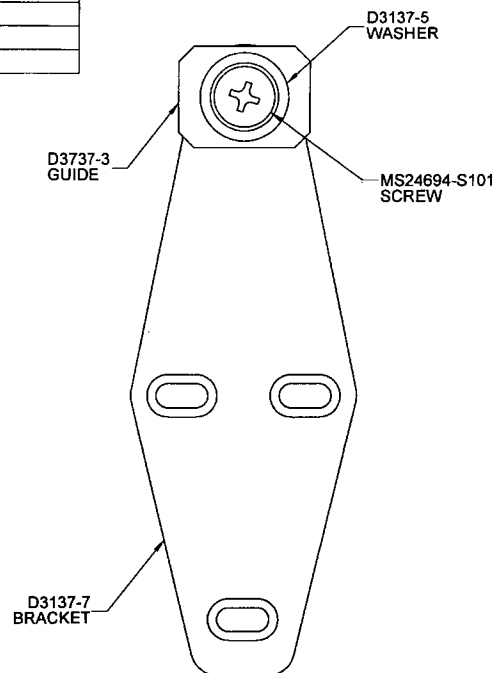
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WORK ORDER  
NO. 1010

F	REDRAWN & REFORMATTED IN SOLIDWORKS. SHEET 3 ZONE A 5 DIM 2.36 WAS 2.48, ZONE A 4 0.480 DIM WAS 0.605, ZONE A 8 0.67 DIM WAS 0.79, ZONE B 5 4.850 DIM WAS 4.975 & ZONE B8 5.28 DIM WAS 5.41. REASON: PART TRIMMED DUE TO INTERFERENCE WITH EXECUTIVE INTERIOR.	AJS	08.05.30
E	ADD -045	RF	05.11.23
D	RE-DESIGN D3137-5; CHANGE DIMS	DS	04.11.03
C	ADD -043	DS	03.08.15
B	ADD RIDGES; ADD MATERIAL PROP	DS	03.01.16
A	NEW ISSUE	DS	02.04.17
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3137	SHEET 1 OF 5
APPROVED		TITLE	SCALE
DE APPR.		BRACKET ASSEMBLY	NTS
DATE	08.05.30	COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

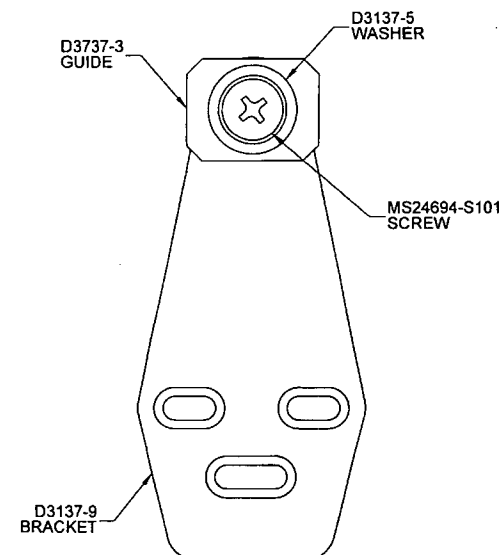
QTY. -041	QTY. -043	QTY. -045	PART NUMBER	DESCRIPTION
X			D3137-041	BRACKET ASSEMBLY
	X		D3137-043	BRACKET ASSEMBLY
		X	D3137-045	BRACKET ASSEMBLY
1			D3137-1	BRACKET
1	1	1	D3137-3	GUIDE
1	1	1	D3137-5	WASHER
	1		D3137-7	BRACKET
		1	D3137-9	BRACKET
1	1	1	MS24694-S101	SCREW



**D3137-041 BRACKET ASSEMBLY**



**D3137-043 BRACKET ASSEMBLY**



**D3137-045 BRACKET ASSEMBLY**

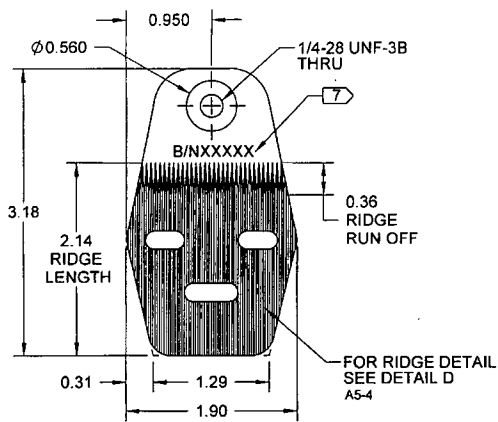
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.18 lbs -041  
0.32 lbs -043  
0.27 lbs -045

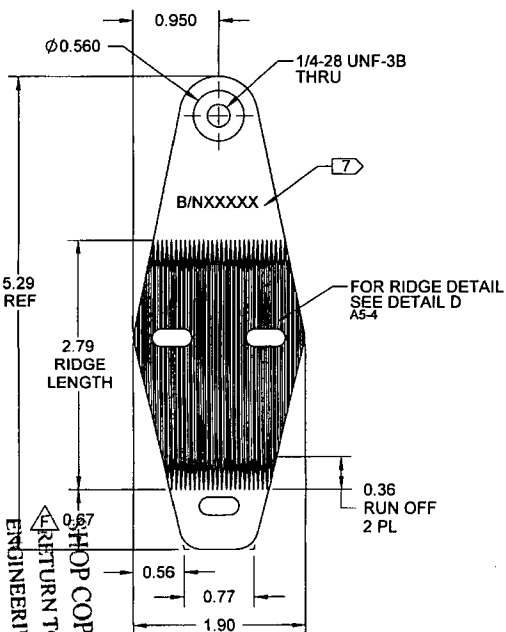
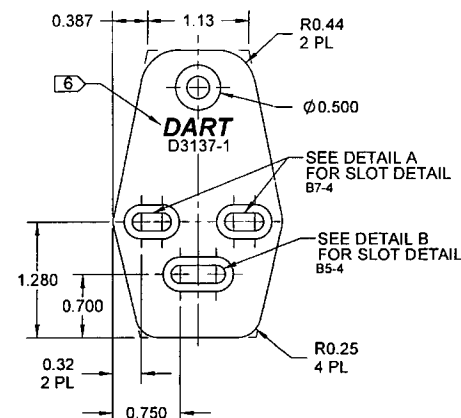
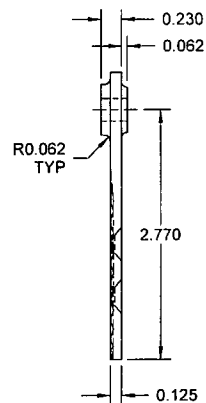
**RELEASED**  
08-06-26/10

DESIGN	DS	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO. <b>D3137</b>	REV. F
MFG. APPR.		TITLE <b>BRACKET ASSEMBLY</b>	SHEET 2 OF 5
APPROVED		SCALE NTS	
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DATE	08.05.30		

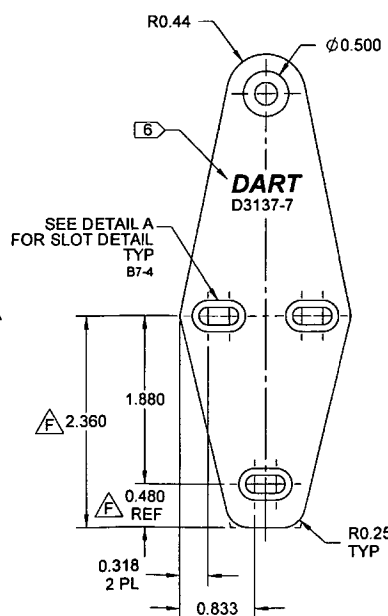
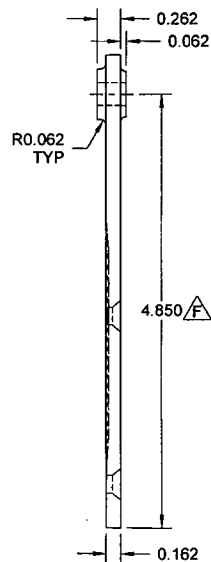
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10/10/10



**D3137-1 BRACKET**



**D3137-7 BRACKET**



**NOTES:**

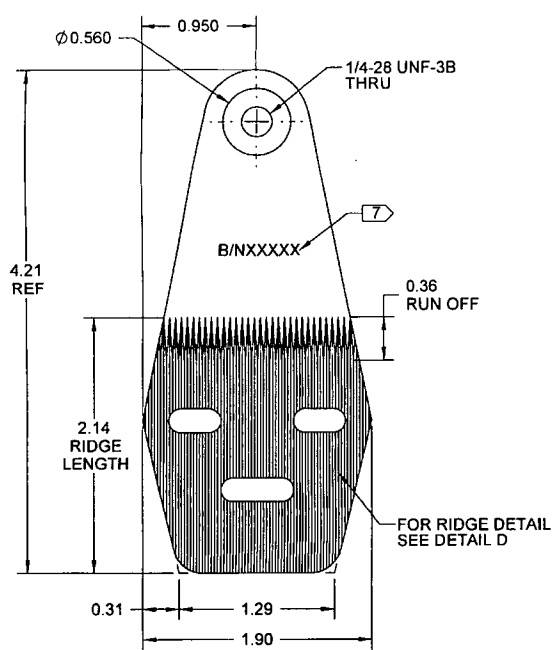
- 1) MATERIAL: -1 & -7  
17-4PH STAINLESS STEEL  
PER AMS 5604 OR 5643  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi  
PER DART SPEC. M17-4-B
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: ENGRAVE DART LOGO USING 0.20 HIGH LETTERS & P/N WITH USING .15 HIGH LETTERS TO A MAX. DEPTH OF 0.010.
- 7) SCRIBE WITH DART B/N USING VIBRATING STYLUS
- 8) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 9) -1 REPLACES PREMIER P/N B30-23000-105/-106

**RELEASED**  
08-06-26

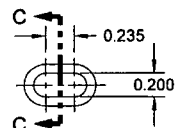
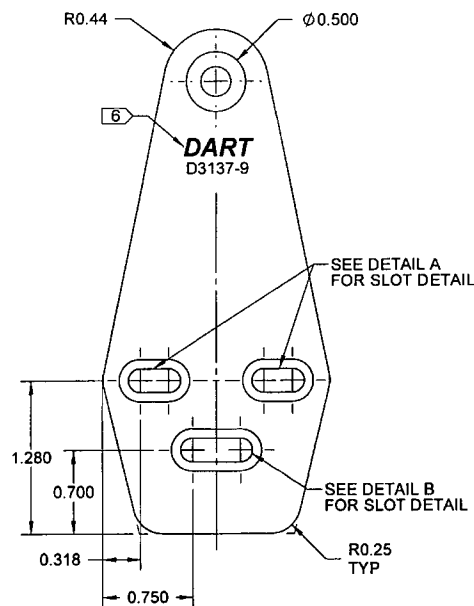
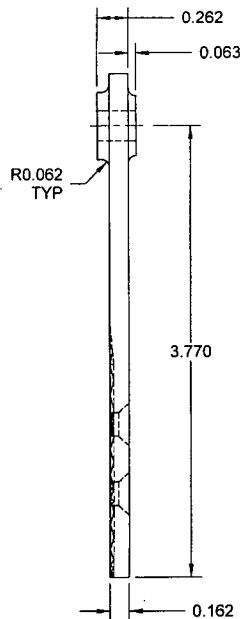
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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D3137	SHEET 3 OF 5
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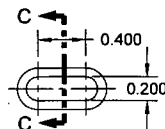




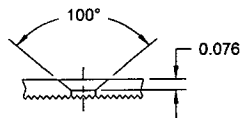
**D3137-9 BRACKET**



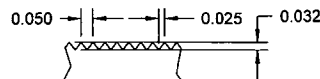
**DETAIL A  
(SLOT DETAIL)**



**DETAIL B  
(SLOT DETAIL)**





**SECTION C-C  
(SLOT DETAIL)**



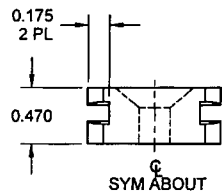
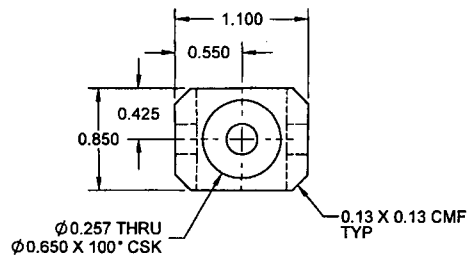
**DETAIL D  
SCALE 2X  
(TYPICAL RIDGE DETAIL)**

**RELEASED**

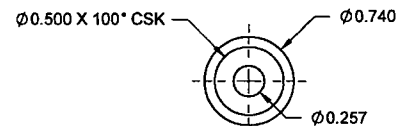
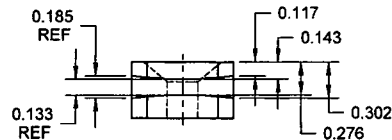
- NOTES:**
- 1) MATERIAL: 17-4PH STAINLESS STEEL  
PER AMS 5604 OR 5643  
MIN ULTIMATE TENSILE = 150 ksi  
MIN YIELD TENSILE = 100 ksi  
PER DART SPEC. M17-4-B
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
  - 6) IDENTIFICATION: ENGRAVE DART LOGO USING 0.20 HIGH LETTERS & P/N WITH USING .15 HIGH LETTERS TO A MAX. DEPTH OF 0.010.
  - 7) SCRIBE WITH DART B/N USING VIBRATING STYLUS
  - 8) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
  - 9) REPLACES PREMIER P/N B30-23000-105/-106

DESIGN	DS	<b>DART AEROSPACE LTD</b>	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
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MFG. APPR.		D3137	SHEET 4 OF 5
APPROVED		TITLE	SCALE
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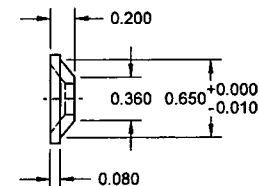
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**D3137-3 GUIDE**



**D3137-5 WASHER**



NO. *[Signature]*  
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 ENGINEERING  
 RETURN TO  
 SHOP COPY

**NOTES:**

- 1) MATERIAL: -3  
 DELRIN II 150E OR ACETRON GP ACETAL, BAR  
 (REF DART SPEC M-DELRIN-B)  
 -5  
 6061-T6 (OR 6061-T651/ T6510/ T6511/ T62) ALUMINUM BAR  
 PER-AMS-QQ-A-225/8 (OR AMS 4117/ 4128/ 4145/ 4116)  
 OR PER-QQ-A-200/8 (OR AMS 4160)  
 REF. DART SPEC M6061T6R
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 (-5 ONLY)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE ASSEMBLED WEIGHT ON SHEET 2
- 8) -3 REPLACES PREMIER P/N B30-2300-207  
 -5 REPLACES PREMIER P/N B30-2300-209

**RELEASED**  
*[Signature]*

DESIGN	DS	<b>DART AEROSPACE LTD</b>	
DRAWN	JJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. F
MFG. APPR.	<i>[Signature]</i>	D3137	SHEET 5 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	BRACKET ASSEMBLY	NTS
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